Dec 23, 2003 Ver. 3.0 Express Mail No.: EV321705560US

ABSTRACT OF THE DISCLOSURE

A non-volatile memory system is organized in physical groups of physical memory locations. Each physical group (metablock) is erasable as a unit and can be used to store a logical group of data. A memory management system allows for update of a logical group of data by allocating a metablock dedicated to recording the update data of the logical group. The update metablock records update data in the order received and has no restriction on whether the recording is in the correct logical order as originally stored (sequential) or not (chaotic). Eventually the update metablock is closed to further recording. One of several processes will take place, but will ultimately end up with a fully filled metablock in the correct order which replaces the original metablock. In the chaotic case, directory data is maintained in the nonvolatile memory in a manner that is conducive to frequent updates. The system supports multiple logical groups being updated concurrently.